



Memorandum

Date: April 29, 2003

Telephone:

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To : John L. Geesman Commissioner and Presiding Member
Arthur H. Rosenfeld, Commissioner and Associate Member

From : **California Energy Commission - Matt Trask**
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Subject : **PICO POWER PROJECT ADDENDUM TO THE STAFF ASSESSMENT**

Attached please find staff's Addendum to the March 26, 2003 Staff Assessment (SA) for the Pico Power Project (PPP) Project (02-AFC-3). The March 26 SA included analysis of all technical areas except Air Quality and Alternatives, which will be analyzed in Phase II of the SA following the release of the Preliminary Determination of Compliance by the Bay Area Air Quality Management District. This Addendum includes only the sections of the SA that require edits, clarifications or revised analysis based on comments received from agencies, the public, and the applicant. It includes changes to 11 sections in the March 26 SA: Biological Resources, Hazardous Materials, Land Use, Noise and Vibration, Traffic and Transportation, Soil & Water Resources, Visual Resources, Waste Management, Worker Safety and Fire Protection, Facility Design, and Geology, Mineral Resources and Paleontology.

The Addendum does not reissue the entire SA, but rather, contains only the edits to the March 26 SA. All changes and additions are contained in the "Changes and Additions" chapter of this Addendum, showing (underlined) new text and (strike out) text to be removed.

Briefly, this Addendum clarifies Staff's conclusions and recommended mitigation concerning the potentially significant environmental impacts that the project could create. With the exception of Air Quality, which has yet to be fully analyzed, staff concludes that the project poses little potential for significant environmental impacts and that those potentially significant environmental impacts that have been identified can be mitigated to less than significant levels. Staff's analysis also concludes that the project can comply with all LORS, again with the exception of Air Quality.

With respect to all technical areas analyzed in the March 26 SA and this Addendum, staff recommends the Commission approve the PPP.

Cc: Gary Fay
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EXECUTIVE SUMMARY

Testimony of Matt Trask

On October 7, 2002, the City of Santa Clara's electric utility department, doing business as Silicon Valley Power (SVP), filed an Application for Certification (AFC) seeking approval from the California Energy Commission to construct and operate the Pico Power Project (PPP), a nominal 122 megawatt (MW) natural gas-fired power plant. The plant would be located on a 3-acre site west of the intersection of Lafayette Street and Duane Avenue and immediately north of SVP's Kifer Receiving Station in the City of Santa Clara, Santa Clara County, California.

On November 20, 2002, the Energy Commission found the AFC to be Data Adequate, initiating an expedited review process of the AFC, in accordance with the emergency siting regulations implementing Public Resources Code section 25550 (AB 970, Chapter 329, Statutes of 2000). Energy Commission Staff released Phase I of its Staff Assessment of the PPP AFC on March 26, 2003, covering all technical areas except Air Quality and Alternatives, which will be covered in Phase II of the SA following the release of the Preliminary Determination of Compliance by the Bay Area Air Quality Management District. The analyses contained in the initial Staff Assessment (SA) were based upon information from: 1) the AFC; 2) responses to initial data requests, workshops, and site visits; 3) supplementary information from federal, state, and local agencies; 4) existing documents and publications; and 5) staff research.

This SA Addendum contains updated information in 11 technical areas concerning the Commission staff's independent analysis and recommendations on the PPP. This Executive Summary is an update of the summary provided in the March 26 SA, plus a summary of the materials contained in this Addendum.

The PPP and related facilities, such as the project's associated natural gas line, are under the Energy Commission's jurisdiction. When issuing a license, the Energy Commission acts as lead state agency (Pub. Resource Code § 25519(c)) under the California Environmental Quality Act (Pub. Resource Code §§ 21000 et seq.). Its process has been certified by the Secretary for Resources, allowing the Commission's siting plan documentation to be used in lieu of an environmental impact report (Cal. Code Regs., tit. 14 § 15251(k)).

It is the responsibility of the Energy Commission staff to complete an independent assessment of the project's potential effects on the environment, the effects on the public's health and safety, and determine whether the project conforms to all applicable laws, ordinances, regulations and standards (LORS). Staff also recommends measures to mitigate potential significant adverse environmental impacts associated with the construction, operation, and eventual closure of the project, if approved by the Energy Commission.

Staff has concluded that, for all technical areas covered in this Addendum, construction and operation of the PPP will not result in significant impacts to the environmental or public safety. It is important to note, however, that the SA and the Addendum are not the decision documents for the Energy Commission. The final decision on the proposed

project will be made by the Commissioners of the California Energy Commission only after submission of this Addendum to the SA, as well as Phase II of the SA, any other Addenda to the SA, testimony of the applicant and other parties, and evidentiary hearings. Evidentiary hearings for all areas covered in Phase I of the SA and this Addendum are scheduled to begin at 9 am on May 7 in Hearing Room A at the Energy Commission in Sacramento. When making their final decision to approve or disapprove the PPP, the Commissioners will consider the recommendations of all interested parties, including those of the Energy Commission staff, the applicant, intervenors, concerned citizens, and local, state, and federal agencies.

PROJECT LOCATION AND DESCRIPTION

If approved, the project would occupy a 2.86 acre parcel within the City of Santa Clara in Santa Clara County, California, immediately north of SVP's existing Kifer Receiving Station. The new combined-cycle facility would be expected to generate 122 megawatts (MW) under nominal conditions, with the ability to peak fire up to 147 MW.

The generating facility would consist of two General Electric LM-6000PC Sprint combustion turbine-generators (CTGs), a single condensing steam turbine generator (STG), a deaerating surface condenser, a mechanical draft plume-abated cooling tower; and associated support equipment. The CTGs are equipped with standard combustors, air inlet chilling, and heat recovery steam generators (HRSGs) with duct burners. The emission reduction system includes a selective catalytic reduction (SCR) unit and water injection to control nitrogen oxides (NO_x) and an oxidation catalyst to control carbon monoxide (CO). An existing pipeline currently located within the boundaries of the PPP site will supply tertiary treated recycled waste water from the San Jose/Santa Clara Water Pollution Control Plant (WPCP), located in the City of Alviso, to provide cooling water for the plant. A 115-kilovolt (kV) on-site switchyard will deliver the plant's power directly to the adjacent Kifer Receiving Station and the nearby Scott Receiving Station, located approximately 0.25 miles west of the site. The project includes approximately 2.0 miles of new 12-inch diameter underground natural gas pipeline to convey gas from Pacific Gas & Electric Company's (PG&E) gas distribution Line 132 to a gas compressor facility located on City of Santa Clara property adjacent to the PPP site. Approximately 900 feet of 18-inch diameter underground pipeline will be needed to convey the project's waste water discharge from the PPP site south in Lafayette Avenue to a 27-inch waste water main in Central Expressway. The City of Santa Clara would provide domestic water for drinking, showers, sinks and general sanitary purposes from its municipal system.

The general location of the SJVEC is shown on Figure 1 of the March 26 Staff Assessment, See **Project Description Figure 1**. An aerial diagram of the plant layout in **Project Description Figure 2** in the Staff Assessment shows the immediate power plant site, and **Project Description Figure 3** in the Staff Assessment provides a view of how the plant would look on the site.

CONSTRUCTION AND OPERATIONS

The total Project cost is estimated to be approximately \$160 million dollars. Originally, construction was planned to begin in June 2003 and be completed by September 2004. This schedule has since been eclipsed by events out of the Applicant's and the Commission's control. Because of delays in the release of the Preliminary Determination of Compliance (PDOC) for the project by the Bay Area Air Quality Management District (BAAQMD), staff cannot currently provide an estimated schedule for construction and operation of the facility.

PUBLIC AND AGENCY COORDINATION

Two publicly noticed workshops were held on the topics of Biological Resources, Cultural Resources, Hazardous Materials, Land Use, Noise, Soil and Water Resources, Traffic and Transportation, and Visual Resources. One workshop was held in the City of Santa Clara and the other at the Energy Commission. In addition to these workshops, extensive coordination has occurred with the numerous local, state, and federal agencies that have an interest in the project. Written comments on Phase I of the SA were encouraged and were considered in staff's Addendum.

OVERVIEW OF STAFF'S CONCLUSIONS

Staff believes that, for the technical areas covered in Phase I of the SA and this Addendum, the project poses little potential for significant environmental impacts. Those potentially significant environmental impacts that were identified are proposed to be mitigated to less than significant levels. Staff's analysis also shows that the project will comply with all applicable LORS for all areas covered in this Addendum. A summary of potential impacts and LORS compliance is below.

Technical Discipline	Environmental/System Impact	Conforms with LORS
Air Quality	Unresolved ¹	Unresolved ¹
Alternatives	Unresolved ¹	Unresolved ¹
Biological Resources	Impacts mitigated	Yes
Cultural Resources	Impacts mitigated	Yes
Power Plant Efficiency	None	N/A
Power Plant Reliability	None	N/A
Facility Design	N/A	Yes
Geology and Paleontology	Impacts mitigated	Yes
Hazardous Materials	Impacts mitigated	Yes
Land Use	N/A	Yes
Noise and Vibration	Impacts mitigated	Yes
Public Health	Impacts mitigated	Yes
Socioeconomics	None	Yes
Traffic and Transportation	Impacts mitigated	Yes
Transmission Line Safety	Impacts mitigated	Yes
Transmission System Engineering	Impacts mitigated	Yes
Visual Resources	Impacts mitigated	Yes
Waste Management	None	Yes
Water and Soil Resources	Impacts mitigated	Yes
Worker Safety	None	Yes

¹ These technical areas will be covered in Phase II of the Staff Assessment

The following summarizes staff's position with respect to biological resources, the only area of concern raised in the Staff Assessment Addendum analysis. For a more complete discussion of concerns and conclusions for all environmental impacts, see the Executive Summary of the March 26 Staff Assessment and the respective technical sections.

Biological Resources

Staff and the applicant are still awaiting a written determination by the US Fish and Wildlife Service that the project qualifies for processing under a low-effect Habitat Conservation Plan (HCP). The applicant is reluctant to agree to Staff's proposed habitat compensation mitigation until USFWS issues its written confirmation that the low-effect HCP is appropriate. Staff and the applicant are confident that this issue will be resolved prior to evidentiary hearings on the matter.

ORGANIZATION OF THE ADDENDUM TO THE STAFF ASSESSMENT

The Addendum to Staff Assessment of the Pico Power Project AFC is organized in three chapters: the Executive Summary, Corrections and Additions, and Response to Comments. As stated above, the Executive Summary is both an update of the summary in the March 26 SA, and a summary of this Addendum. The Corrections and Additions chapter contains all the changes and additions that were made to the SA sections, due to new information that was gathered by staff since release of the SA, or to comments from other governmental agencies or the Applicant. The corrections and additions are shown in the "redline/strikeout" format, with new text underlined and deleted text struck through. Very few changes were made in the text in this Executive Summary, compared to the similar text found in the Executive Summary in the March 26 SA, so the redline/strikeout format was not used in the Executive Summary. The Response to Comments document contains staff's responses to comments from the only governmental agency submitting comments during Phase I of the SA, the California Department of Toxic Substances Control, as well as responses to selected comments from the Applicant.

CORRECTIONS AND ADDITIONS TO THE PICO POWER PROJECT STAFF ASSESSMENT

Below are the changes and/or additions to the Staff Assessment for the Pico Power Project (PPP) Application for Certification (AFC). The changes or additions occurred based on: comments from government agencies or the Applicant; new information gathered since the SA publication date; and errors in data used in the SA. New text is underlined, while deleted text is shown in "strike-through," so that readers can quickly assess the changes in any given section. Staff will also publish electronic versions of the corrected SA sections on the project website at <http://www.energy.ca.gov/sitingcases/picopower/index.html>.

BIOLOGICAL RESOURCES

Supplemental Testimony of Stuart Itoga

1. At the request of the applicant, staff agrees to remove the last sentence from the Verification paragraph of **BIO-6**. **BIO-6** is hereby revised to read:

U.S. Fish and Wildlife Service Consultation

BIO-6 The project owner shall provide final copies of all documents obtained as a result of formal consultation with the USFWS. The terms and conditions contained in any documents obtained from the USFWS shall be incorporated into the project's BRMIMP.

Verification: At least 60 days prior to initial commissioning activities, the project owner shall submit to the CPM copies of all documents obtained as the result of consultations with the U. S. Fish and Wildlife Service. ~~To be included are copies of the Habitat Conservation Plan and Incidental Take Permit (per Section 10 of the federal Endangered Species Act).~~

2. At the request of the applicant, staff agrees to revise Condition of Certification **BIO-8** to read:

BIO-8 The project owner shall implement the mitigation measures listed below.

1. Provide wildlife escape ramps for construction areas that contain steep walled holes or trenches if outside of an approved, permanent exclusionary fence;
2. Inspect trenches each morning for entrapped animals prior to the beginning of construction. Construction will be allowed to begin only after trapped animals are able to escape voluntarily;
3. Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater for sensitive species (such as burrowing owls) prior to pipe burial. Pipes to be left in trenches overnight will be capped;

4. Provide a post-construction compliance report, within 45 calendar days of completion of the project, to the Energy Commission CPM;
5. Report all inadvertent deaths of sensitive species to the appropriate project representative. Injured animals shall be reported to CDFG and the project owner shall follow instructions that are provided by CDFG; and,
6. Conduct pre-construction bird nest surveys. Upon discovery of any bird nests, the CPM will be notified as to appropriate action necessary.

All inspections may be performed by either the Designated Biologist or his/her appropriately trained and qualified delegate.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP.

3. Page 4.1-19, Condition of Certification **BIO-9** is hereby revised to read:

HABITAT COMPENSATION

BIO-9 To compensate for potential impacts to serpentine habitats and associated endemic species, the project owner shall provide ~~a maximum of 40 acres of~~ land within critical habitat occupied by sensitive serpentine endemic species. The project owner shall calculate an appropriate endowment for management of the compensation habitat in perpetuity using the Center for Natural Lands Management Property Analysis Record (PAR). Also to be provided is the name of the entity that would manage and protect the land in perpetuity.

Verification: At least 60 days prior to initial commissioning activities, the project owner shall provide to the CPM for approval, in consultation with the USFWS, the name of the management entity and written verification that the compensation lands have been purchased and protected in perpetuity. The project owner shall also provide the PAR analysis and written verification that the appropriate endowment fund (determined by the PAR analysis) has been received by the approved management entity.

HAZARDOUS MATERIALS

Supplemental Testimony of Geoff Lesh and Rick Tyler

1. To correct an error in the identity of the local Certified Unified Program Authority, Page 4.3-2, Paragraph 3, is hereby revised to read:

Section 25503.5 of the California Health and Safety Code requires facilities that store or use hazardous materials to prepare and file a Business Plan with the local Certified Unified Program Authority (CUPA), in this case the Santa Clara ~~County Health Department, Division of Environmental Health~~ City Fire Department Hazardous Materials Division. This Business Plan must contain information on the business activity, the owner, a hazardous materials inventory, facility maps, an Emergency Response Contingency Plan, an Employee Training Plan, and other record-keeping forms.

2. Similarly, Page 4.3-11, Paragraph 1, is hereby revised to read:

The requirements for handling of hazardous materials remain in effect until such materials are removed from the site, regardless of facility closure. Therefore, the facility owners are responsible for continuing to handle such materials in a safe manner, as required by applicable laws. In the event that the facility owner abandons the facility in a manner that poses a risk to surrounding populations, staff will coordinate with the California Office of Emergency Services, Santa Clara ~~County Department of Health~~ City Fire Department Hazardous Materials Division, and the California Department of Toxic Substances Control (DTSC) to ensure that any unacceptable risk to the public is eliminated. Funding for such emergency action can be provided by federal, state or local agencies until the cost can be recovered from the responsible parties (O.E.S. 1990).

3. To clarify restrictions on storage and use of flammable materials near the sulfuric acid tank, Page 4.3-6, Paragraph 4, last sentence, is hereby revised to read:

Approximately 2,000 gallons of 93 percent sulfuric acid would be used and stored on-site. This material does not pose a risk of off-site impacts, because it has relatively low vapor pressures and thus spills would be confined to the site. Because of public concern at another proposed energy facility in 1995, staff conducted a quantitative assessment of the potential for impact associated with sulfuric acid use, storage, and transportation. Staff found no hazard would be posed to the public. However, in order to protect against risk of fire, an additional Condition of Certification (see HAZ-6) will require the project owner to ensure that no combustible or flammable material is stored, ~~used, or transported~~ within 100 feet of the sulfuric acid tank.

4. Similarly, Page 4.3-12, **Condition of Certification HAZ-6** is hereby revised to read:

HAZ-6 The project owner shall ensure that no combustible or flammable material is stored ~~or used~~ within 100 feet of the sulfuric acid tank.

Verification: At least 30 days prior to the first delivery of sulfuric acid onsite, the Project Owner shall provide to the CPM for review and approval copies of the facility design drawings showing the location of the sulfuric acid storage tank and the location of any tanks, drums, or piping containing any combustible or flammable material and the route by which such materials will be transported through the facility.

5. Because the federal Resource Management Plan requirements do not apply to the Pico Power Project, Page 4.3-11, "Conclusion" paragraph, is hereby revised to read:

Staff's evaluation of the proposed project (with staff's proposed mitigation measures) indicates that hazardous materials use will pose no potential for significant impacts on the public. With adoption of the proposed conditions of certification, the proposed project will comply with all applicable laws, ordinances, regulations and standards (LORS). In response to Health and Safety Code, section 25531 et seq., the applicant may be required to develop an RMP. The RMP, if required by the Santa Clara County Department of Health, will be submitted to ~~EPA, the Santa Clara County Department of Health~~ City Fire Department, and the Energy Commission staff for evaluation. To insure adequacy of the RMP, staff's proposed conditions of certification require that the RMP, if required, be submitted for concurrent review by EPA, the ~~Santa Clara County department of Health~~ City Fire Department, and Energy Commission Staff. In addition, Staff's proposed conditions of certification also require Santa Clara County's acceptance of the RMP and Staff's approval of the RMP prior to delivery of any hazardous materials to the facility. With adoption of staff's proposed conditions of certification, the project will also comply with Health and Safety Code, section 41700, and it will not pose any potential for significant impacts to the public from hazardous materials releases.

6. Similarly, Page 4.3-12, **Condition of Certification HAZ-2** is hereby revised to read:

HAZ-2 The project owner shall provide a Risk Management Plan RMP (if required by regulation) to the Certified Unified Program Authority (CUPA) and the CPM for review ~~at the time the RMP is first submitted to the U.S. Environmental Protection Agency (EPA).~~ A Hazardous Materials Business Plan (HMBP, which shall include the proposed building chemical inventory as per the UFC) shall also be submitted to the CUPA for review and to the CPM for review and approval prior to construction of hazardous materials storage and containment structures. The project owner shall include all recommendations of the CUPA and the CPM in the final HMBP. A copy of the final RMP, including all

comments, shall be provided to the CUPA and the CPM ~~once it gets EPA approval.~~

Verification: At least 30 days prior to the commencement of construction of hazardous materials storage and containment structures, the project owner shall provide the final plans (RMP and HMBP) listed above to the CPM for approval.

7. Because the PPP design does not include a secondary containment building, Page 4.3-12, **Condition of Certification HAZ-4** is hereby revised to read:

HAZ-4 The aqueous ammonia storage facility shall be designed to either the ASME Pressure Vessel Code and ANSI K61.6, or to API 620. In either case, the storage tank shall be protected by a secondary containment basin capable of holding 150 percent of the storage volume plus the 24-hour rainfall from the 25-year storm event.

Verification: At least 60 days prior to the first delivery of aqueous ammonia to the storage tanks, the project owner shall submit final design drawings and specifications for the ammonia storage tank, and the secondary containment basin, ~~and the secondary containment building~~ to the CPM for review and approval.

8. To clarify that staff is not requiring additional safety features above and beyond those codes that are applicable at the time of design and construction of the natural gas pipeline, **Condition of Certification HAZ-11** is hereby revised to read:

HAZ-11 The natural gas pipeline shall be designed to meet CPUC General Order 112-D&E and 58 A standards, or any successor standards, and will be designed to meet Class III service. The pipeline shall be designed to withstand seismic stresses and will be surveyed annually for leakage. The project owner shall incorporate the following safety features into the design and operation of the natural gas pipeline in accordance with the applicable code: (1) butt welds will be x-rayed and the pipeline will be pressure tested prior to the introduction of natural gas into the line; (2) the pipeline will be surveyed for leakage annually; (3) the pipeline route will be marked to prevent rupture by heavy equipment excavating in the area; and (4) valves will be installed to isolate the line if a leak occurs.

Verification: Prior to the introduction of natural gas into the pipeline, the project owner shall submit design and operation specifications of the pipelines to the CPM for review and approval.

LAND USE

Supplemental Testimony of David Flores

1. To clarify that the requirements of **Condition of Certification LAND-8** is tied to construction of realigning of the pedestrian/bicycle path, and not to construction of the power plant, **Condition of Certification LAND-8** is hereby revised to read:

LAND-8 ~~Prior to the start of construction, the project owner shall ensure that partially realign the pedestrian/bicycle pathway within the 60-foot dedicated right-of-way located at Gianera Street and Wilcox Avenue is partially realigned to accommodate the gas metering station prior to construction of the gas metering station.~~

Verification: At least 30 days prior to the start of construction of the gas metering station, the project owner shall provide the CPM with proof of a contract indicating that completion of the above realignment of the pedestrian/bicycle pathway will be accomplished prior to construction of the gas metering station.

NOISE

Supplemental Testimony of Steve Baker

1. Because the project design no longer includes sound barriers, paragraph 4, page 4.5-14, of the March 26 SA is hereby revised to read:
 1. noise barrier walls on the north, west and northeast site boundaries;
 - ~~2. a noise barrier wall east and south of the steam turbine generator;~~
 - ~~3. a noise barrier wall north, east and south of the circulating water pumps;~~
 2. splash baffles, closed ends and closable louvers on the cooling tower;
 3. purchase of quieter equipment; and
 4. a building enclosing the natural gas compressors.
2. To clarify the specified noise limit from steam or air blows during plant testing, **Condition of Certification NOISE-4** is hereby revised to read:

STEAM BLOW MANAGEMENT

NOISE-4 If a traditional, high-pressure steam blow process is employed, the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 80 dBA measured at a distance of 100 feet. The project owner shall conduct steam blows only during the hours specified in Condition of Certification **NOISE-8**, unless the CPM agrees to longer hours based on a demonstration by the project owner that offsite noise impacts will not cause annoyance.

If a low-pressure continuous steam blow or air blow process is employed, the project owner shall submit a description of this process, with expected noise levels and projected hours of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting noise levels from the steam or air blows alone will not exceed 49 dBA L_{eq} measured at the apartments at 1425 Laurelwood Road. If the low-pressure process is approved by the CPM, the project owner shall implement it in accordance with the requirements of the CPM.

Verification: At least 15 days prior to the first high-pressure steam blow, the project owner shall submit to the CPM drawings or other information describing the temporary steam blow silencer and the noise levels expected, and a description of the steam blow schedule.

At least 15 days prior to any low-pressure continuous steam blow, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the projected time schedule for execution of the process.

3. To clarify the specified noise limit from plant operation, **Condition of Certification NOISE-6** is hereby revised to read:

NOISE RESTRICTIONS

NOISE-6 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation alone to exceed 45 dBA L_{eq} measured at the apartments at 1425 Laurelwood Road, and that the noise due to plant operation will comply with the noise standards of the City of Santa Clara General Plan, or 63.3 dBA L_{eq} at the site boundaries.

No new pure-tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

- A. When the project first achieves a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at the monitoring site near the apartments at 1425 Laurelwood Road. This survey during power plant operation shall also include measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced.
- B. If the results from the noise survey indicate that the power plant noise level (L_{eq}) at the affected receptor exceeds the above value for any given hour during the 25-hour period, or that the noise standards of the LORS have been exceeded, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.
- C. If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Verification: The survey shall take place within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity. Within 15 days after completing the survey, the project owner shall submit a summary report of the survey to the City of Santa Clara Planning Department, and to the CPM. Included in the survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the noise survey.

Within 15 days of completion of the new survey, the project owner shall submit to the CPM a summary report of the new noise survey, performed as described above and showing compliance with this condition.

- 4. Following clarification from the City of Santa Clara concerning exemptions to a City Ordinance limiting the hours of certain types of construction, **Condition of Certification NOISE-8** is hereby revised to read:

CONSTRUCTION TIME RESTRICTIONS

NOISE-8 ~~Heavy equipment operation and noisy construction work relating to any project features that lie within 300 feet of residentially zoned property shall be restricted to the times of day delineated below:~~

~~Monday through Friday 7 a.m. to 6 p.m.
Saturday 9 a.m. to 6 p.m.
Sunday and Holidays Not permissible~~

Noise due to high pressure steam blows shall be restricted to the times of day delineated below:

Monday through Friday 7 a.m. to 6 p.m.
Saturday 9 a.m. to 6 p.m.
Sunday and Holidays Not permissible

Holidays are defined as January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, Thanksgiving Day and the day after, and December 25th.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Verification: Prior to ground disturbance, the project owner shall transmit to the CPM a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

SOIL AND WATER RESOURCES

Supplemental Testimony of Linda Bond and Antonio Mediati

1. To clarify staff's conclusions concerning potentially significant environmental impacts from the project, and the purpose of the required aquifer test program, Page 4.8-21, under the heading of **GroundWater Contamination**, is hereby revised to read:

General information supports the conclusion that the project groundwater pumping would not ~~is unlikely to~~ cause contamination of the region's primary drinking water supply because:

- The PPP site is located within the boundaries of the Major Aquitard; and
- Regional pumping from the Lower Aquifer Zones in the vicinity of the project site has not caused any reported contamination from the Upper Aquifer Zone (SVP 2003b).

However, given the limited on-site sampling of groundwater quality and the lack of information necessary to calculate the gradient that will be induced by project pumping, the SCVWD requested that the Applicant perform aquifer analyses with the project backup well to evaluate site-specific conditions. ~~staff cannot fully assess the potential for significant adverse impacts from groundwater contamination that would be caused by project groundwater pumping.~~ In response ~~order to augment the limited information currently available,~~ the Applicant has proposed an aquifer test program (SVP 2003c) to augment the limited information currently available.

Staff supports the proposed aquifer test program, which is discussed in the Section describing the Applicant's Proposed Mitigation, and has included the program required in Condition of Certification SOIL & WATER 8. Staff has determined that this program will provide site-specific information that either will confirm its finding of no significant adverse impact or will produce new information regarding the potential for contaminant transport. If the aquifer test program identifies a potential for a significant adverse impact to groundwater quality caused by project pumping from the backup well, mitigation will be developed to ensure groundwater protection from contamination.

2. Page 4.8-25, first paragraph, is hereby revised to update the stormwater discharge volumes supplied in the applicant's comments:

The peak flow associated with the 10- and 100-year storm events at the site before construction (pre-development) was compared to the after construction (post-development) conditions. The result of this evaluation shows that pre-project run-off conditions for the 10-year and 100-year storm events would be 3.21 ~~2.94~~ cfs and 4.78 ~~4.34~~ cfs, respectively. Post development run-off conditions for the same storm events were calculated to be 4.52 ~~3.45~~ cfs and 6.74 ~~4.69~~ cfs. Therefore, the PPP site development would result in a net increase in surface water run-off of approximately 41 ~~8~~ percent or 1.31 ~~0.24~~ cfs (10-year storm) and 1.96 ~~0.35~~ cfs (100-year storm) (SVP 2003d). A letter from the City of Santa Clara dated and received April 25, 2003, stated: "The calculation results for the post-development storm water runoff for the 10-year

storm are 4.68 cfs, and 6.86 cfs for the 100-year storm. Based on the foregoing, it has been conclude that the net increase of 1.47 cfs for the 10-year storm and the net increase of 2.08 for the 100-year storm does not represent a significant increase in storm water runoff from the project site. The increased runoff will not cause the City of Santa Clara storm water collection system to exceed its capacity” (City of Santa Clara 2003).

3. Similarly, Page 4.8-29, Paragraph 3, is hereby revised to update the storm water discharge volumes provide by the applicant in the applicant’s comments:

The drainage system within the plant site is designed to convey the flow from a 100-year storm event. The sizing of the drain pipes indicates that a 100-year event peak discharge rate will be less than 50 percent of the capacity of a 15-inch RC drainpipe. The site drainage system would discharge to an existing 54-inch storm drain (SVP 2002c, DR 64). The PPP would lead to a net increase of 1.31 0-24 cfs (10-year storm) and 1.96 0-35 cfs (100-year storm) to the storm drain system (SVP 2003d 2002c, DR 64). The applicant stated that the storm drain has not had capacity problems in the past.

4. On Page 4.8-31, the following paragraph has been added to the section under the heading of **Groundwater**, concerning the aquifer testing program:

The Applicant has further specified that “this program would be implemented before the SVP (the project) uses the backup well for cooling water,” and states that it “would be sufficient to confirm the finding of no significant impact.... If the test program were to lead to a finding of a potentially significant adverse impact to the aquifer, SVP (the project operator) would propose to modify the use of the backup well to mitigate this impact to a level below significance.” (SVP 2003d)

5. To clarify the requirements of the aquifer test program, Page 4.8-33 is hereby revised to read:

General information on the area’s hydrology and history of contamination supports the conclusion that the project would not cause contamination of the region’s primary drinking water supply.

~~To address the unresolved issue of potential impacts of groundwater contamination, staff recommends~~ However, staff supports the implementation of the Applicant’s proposed aquifer test program (SVP 2003c) and has included the program in **Conditions of Certification SOIL & WATER 8** with the addition of water quality testing of the Upper Aquifer Zone.

Because previous on-site groundwater sampling was limited to one very shallow boring (12 feet in depth), staff recommends that additional water quality samples should be collected from the shallow observation well to be constructed for the aquifer test program. These samples should be analyzed at a State-certified laboratory for Title 22 constituents, ~~as well as petroleum hydrocarbons (TPH-d, TPH-g, and TRPH), which~~

~~have been constituents of concern at the project site.~~ This recommended requirement is addressed in **Conditions of Certification SOIL & WATER 7.**

| The proposed aquifer test program should include the calculation of the vertical gradients between the Upper and Lower Aquifer Zone under worst-case pumping conditions. Worst-case groundwater pumping is defined as an annual groundwater pumping rate of 57 million gallons for a period of 45 days each year for 40 years.

| The PPP backup well will not be constructed and the proposed aquifer test program will not be performed until after certification. If the additional information made available as a result of the aquifer test program indicates a significant adverse impacts may occur, then mitigation measures shall be developed to reduce the impacts to a level less than significant. Staff recommends the following criteria for evaluating the aquifer test program results.

- Significant Contamination Criteria: Detection of contamination concentrations of Title 22 constituents above the Maximum Contaminant Levels (MCL) in the Upper Aquifer Zone.
- Significant Gradient Criteria: A calculated vertical downward gradient between the Upper and Lower Aquifer Zones that would allow transmission of water over the life of the project under worst-case groundwater pumping conditions.

| A revised finding of potential significant adverse impact caused by backup pumping would require detection of both significant contamination and a significant gradient.

| ~~Because the PPP backup well would not be constructed and the proposed aquifer test program would not be performed until after certification, the criteria for evaluating the aquifer test program results and conditional mitigation to address for a revised potential finding of potential significant adverse impacts is required prior to certification. Staff recommends the following criteria for evaluating the aquifer test program results.~~

| ~~•Significant Contamination Criteria: Detection of contamination concentrations of Title 22 constituents above the Maximum Contaminant Levels (MCL) or detection of petroleum hydrocarbons in the Upper Aquifer Zone.~~

| ~~•Significant Gradient Criteria: A calculated vertical downward gradient between the Upper and Lower Aquifer Zones that would allow transmission of water over the life of the project under worst-case groundwater pumping conditions.~~

| ~~A revised finding of potential significant adverse impact caused by backup pumping would require detection of both significant contamination and a significant gradient.~~

| Staff recommends that a copy of all sample results and the aquifer test program technical report be provided to the SCVWD and San Francisco Bay RWQCB, as well as to the CEC.

| Staff has determined that this program will provide site-specific information that either will confirm its finding of no significant adverse impact or will produce new information regarding the potential for contaminant transport. If the proposed aquifer test and recommended groundwater quality sampling confirm the absence of significant

contamination in the Upper Aquifer Zone and a low transmission rate between the Upper and Lower Aquifer Zones that would preclude the transmission of water from the Upper to the Lower Aquifer Zone over the life of the project under worst-case conditions, ~~staff would conclude that no significant adverse impacts from groundwater contamination would be caused by the proposed project groundwater use and no additional remedial actions would be required.~~

If the aquifer test program identifies a potential for a potential significant adverse impact to groundwater quality caused by project pumping from the backup well, mitigation will be required to ensure groundwater protection from contamination. ~~If the results of the aquifer test show a potential pumping impact, t~~ In this case, the project owner would be required to submit a mitigation plan ~~amend the project license to that identifies~~ actions that will be implemented to avoid or reduce the impact to a level less than significant. This recommended requirement is addressed in **Conditions of Certification SOIL & WATER 8.**

6. Page 4.8-37 is hereby revised to add the following references to include the applicant's comment on staff' assessment:

SVP (Silicon Valley Power) 2003d. Applicant's Comments on the California Energy Commission Staff Assessment (Part 1) April 2003. Cited in text as (SVP 2003d)

City of Santa Clara. 2003. Storm water collection system capacity, Pico Power Project. City of Santa Clara Engineering Department. Rajeev Batra, City Engineer, Santa Clara, CA 95050. Cited in text as (City of Santa Clara 2003)

7. To clarify the entities that should receive and review various soil and water-related plans developed for the project, **Condition of Certification SOIL & WATER-1** is hereby revised to read:

SOIL & WATER-1: Prior to beginning any site mobilization activities, the project owner shall obtain staff approval of a Sedimentation and Erosion Control Plan. The plan shall be submitted to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment and to the CPM for approval.

Verification: At least 60 days prior to the start of any site mobilization activities the Sedimentation and Erosion Control Plan shall be submitted to the CPM for approval and to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment. Comments from other agencies shall be submitted to the CPM. The CPM must approve the sedimentation and Erosion Control Plan prior to the initiation of any site mobilization activities.

8. Similarly, **Condition of Certification SOIL & WATER-2** is hereby revised to read:

SOIL & WATER-2: Prior to beginning site mobilization, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with

Construction Activity from the Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Construction Activity. The SWPPP will include final construction drainage design consistent with the ~~Santa Clara County Ordinances regarding grading, and discharge of storm water, as well as the~~ City of Santa Clara requirements for grading, drainage and erosion control and specify BMPs for all on and off-site PPP project facilities. This includes providing calculations for determining the design capacity of the perimeter drainage, as well as final site drainage plans and locations of BMPs. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment at least 60 days prior to start of any site mobilization activities.

Verification: At least 60 days prior to the start of any site mobilization activities, the SWPPP for Construction Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Construction Activity shall be submitted to the CPM for approval and to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment. Approval of the SWPPP by the CPM must be received prior to initiation of any site mobilization activities.

9. Similarly, **Condition of Certification SOIL & WATER-3** is hereby revised to read:

SOIL & WATER-3: Prior to initiating project operation, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity from Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Industrial Activity. The SWPPP will include final operating drainage design consistent with the Santa Clara County Ordinances regarding discharge of storm water as well as the City of Santa Clara requirements for drainage and erosion control and specify BMPs and monitoring requirements for the PPP project facilities. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment at least sixty days prior to initiation of project operation.

Verification: At least 60 days prior to the start of project operation, the SWPPP for Industrial Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity shall be submitted to the CPM. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment at least 60 days prior to initiation of project operation. Approval of the final SWPPP plan by the CPM must be received prior to initiation of project operation.

10. To clarify the requirements of the aquifer test program, **Condition of Certification SOIL & WATER-7** is hereby revised to read:

SOIL & WATER-7: The project owner shall collect groundwater quality samples from the shallow observation well to be constructed for the aquifer test program. These samples shall be analyzed for Title 22 constituents, ~~as well as petroleum~~

hydrocarbons (TPH-d, TPH-g, and TRPH), at a State-certified laboratory. The project owner shall submit a groundwater sampling report, which includes a description of the sampling procedures and laboratory results to the CPM, the RWQCB and the Santa Clara Valley Water District at least 90 days prior to the commercial operation of the project backup well.

Verification: The project owner shall submit a groundwater sampling report, which includes a description of the sampling procedures and laboratory results, to the CPM, the RWQCB and the Santa Clara Valley Water District at least 90 days prior to the commercial operation of the project backup well.

11. Similarly, **Condition of Certification SOIL & WATER-8** is hereby revised to read:

SOIL & WATER-8: The project owner shall conduct the aquifer test program as proposed by the applicant in the *Statement of Work, Proposed Aquifer Test Program, Backup Water Supply Well, Pico Power Project* (SVP 2003c).

The project owner shall calculate the projected vertical gradient between the Upper and Lower Aquifer Zones over the life of the project based on an annual groundwater pumping rate of 57 million gallons for a period of 45 days each year for 40 years. The aquifer test procedures, the interpretation of the test results, the raw data (in machine readable format), the calculation of aquifer properties, and the impacts analyses shall be presented and discussed in the aquifer test technical report. ~~If the results indicate a potential impact, the project owner shall amend the project license to identify actions that will be implemented to avoid or reduce the impact to a level less than significant.~~ The aquifer test technical report shall be provided to the RWQCB and the Santa Clara Valley Water District for review, as well as the CPM for approval, at least 90 days prior to the commercial operation of the project backup well.

The aquifer test program would result in a finding of a potential significant adverse impact caused by backup pumping if the program identifies both significant contamination and a significant gradient at the project, according to the criteria listed below.

- Significant Contamination Criteria: Detection of contamination concentrations of Title 22 constituents above the Maximum Contaminant Levels (MCL) in the Upper Aquifer Zone.
- Significant Gradient Criteria: A calculated vertical downward gradient between the Upper and Lower Aquifer Zones that would allow transmission of water over the life of the project under worst-case groundwater pumping conditions.

If there is a finding of a potential significant adverse impact, the project owner is required to submit a mitigation plan to avoid or reduce the impact to a level less than significant. The Mitigation Plan shall be provided to the Santa Clara Valley Water District for review and comment, as well as the CPM and the RWQCB for

approval, at least 60 days prior to the commercial operation of the project backup well.

| The project owner shall implement the approved Mitigation Plan and provide documentation of implementation to the Santa Clara Valley Water District, the CPM and the RWQCB, at least 30 days prior to the commercial operation of the backup well.

Verification: The project owner shall provide a copy of the aquifer test technical report to CPM for review and approval at least 90 days prior to commercial operation of the project backup well. The project owner shall also provide a copy of the aquifer test technical report to the RWQCB and the Santa Clara Valley Water District for review and comment 90 days prior to commercial operation of the project backup well.

TRAFFIC AND TRANSPORTATION

Supplemental Testimony of Jim Adams

1. Because of a clarification that the applicant intends to utilize railroads for delivery of several major components of the PPP, **Condition of Certification TRANS-7** is hereby revised to read:

TRANS-7 During construction and operation of the PPP, the project owner and contractors shall enforce a policy that all project-related traffic traveling north of Lafayette Street avoid turning left across traffic onto Duane Street, and from turning left onto Lafayette Street from Duane Street. Staff has identified three routes for reaching the site that avoid the left turn off at Lafayette Street.

The project owner and construction contractor will need to require that the construction workforce and truck drivers choose among three routes.

1. The first involves using Central Expressway or San Tomas to Scott Boulevard followed by a turn onto Space Park Drive, a left turn onto Kenneth Street, and a right turn onto Duane Street and proceeding east to the site.
2. The second route involves going south on De La Cruz to Central Expressway and turning right and proceeding west to Scott Boulevard, followed by a right turn on Space Park Drive and proceeding in the same manner identified in the first route.
3. The third route involves going north on Lafayette Street from either the westbound or eastbound lanes on Central Avenue, followed by a left turn onto Comstock and then an immediate right turn into the southern perimeter gate for the PPP site.

Verification: At least 60 days prior to start of site preparation or earth moving activities, the project owner shall provide a traffic routing plan for all phases of project construction and operation to the City of Santa Clara and Caltrans for review and comment, and to the CPM for review and approval.

VISUAL RESOURCES

Supplemental Testimony of Eric Knight

1. To clarify the City of Santa Clara's involvement in determining whether the design of the PPP is consistent with the City's design guidelines, Page 4.11-38, paragraph 1 under Conclusions and Recommendations is revised to read:

Staff has concluded that project structures would cause significant adverse visual impacts (on a direct and cumulative basis) at key observation points 1, 2 and 6 (Lafayette Street). Effective implementation of staff's proposed Conditions of Certification **VIS-2** and **VIS-3** would reduce these impacts to less than significant levels. With the implementation of the applicant's proposed mitigation measures and staff's proposed conditions of certification, the project would be built consistent with local laws, ordinances, regulations, and standards related to visual resources. In particular, staff proposes Conditions of Certification **VIS-3** and **VIS-5** which require the project owner to submit project plans to the City of Santa Clara for design review so that the City can determine consistency with City policies and guidelines for landscaping and mechanical equipment screening.

2. Similarly, Pages 4.11-40 – 4.11-41, **Condition of Certification VIS-3** is revised to read:

VIS-3 The project owner shall prepare and implement a landscape plan to substantially screen views of the power plant and gas metering station and to soften views of the perimeter sound walls. Landscaping shall consist of a mix of trees, shrubs, vines, and groundcovers. Fast growing evergreen species shall be used to ensure that maximum screening of the project is achieved as quickly as possible and is effective year-around. Landscaping shall be provided along Lafayette Street and Duane Avenue of sufficient density and height, to substantially screen project structures from southbound views from Lafayette Street within five years after completion of construction. Landscaping shall be ~~planted~~installed around the gas metering station to substantially screen it from view from residences at Gianera Street and Wilcox Avenue. Suitable irrigation shall be installed to ensure survival of all plantings. Landscaping shall be ~~provided, including plantings to soften the appearance of the sound walls from public rights-of-way and adjacent properties, and~~ installed consistent with the City of Santa Clara Zoning Ordinance and Community Design Guidelines.

The project owner shall submit a landscaping plan to the CPM for review and approval and to the City of Santa Clara Architectural Committee (or other appropriate entity) for review and comment. The submittal to the CPM shall include the City's comments. The plan shall include:

- a) 11"x17" color photo simulations of the proposed landscaping for the power plant, as viewed from KOPs 2, 5, and 6, and for the gas metering station, as

viewed from the residences to the west, at 5 years after planting and at maturity;

- b) A detailed list of plants to be used, specifying their rates of growth and times to maturity and their proposed size and age at planting;
- c) Maintenance procedures, including any needed irrigation and a plan for routine annual or semi-annual debris removal for the life of the project; and
- d) A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project.

The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM.

Verification: The project owner shall submit the landscaping plan prior to ~~first turbine roll~~ commercial operation and at least 90 days prior to installing the landscaping.

If the CPM notifies the project owner that revisions of the submittal are needed, within 30 days of receiving that notification the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the landscaping that the plantings and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in each Annual Compliance Report.

3. Similarly, Pages 4.11-42, **Condition of Certification VIS-5** is revised to read:

VIS-5 To the extent required by the City of Santa Clara Community Design Guidelines, the project owner shall minimize the visibility of mechanical equipment located on top of the heat recovery steam generator (HRSG) units from public rights-of-way and nearby properties. The color or colors of any screening materials shall minimize visual intrusion and contrast by blending with the landscape and other project structure colors.

The project owner shall develop a plan for screening or otherwise minimizing the visibility of mechanical equipment located on the HRSG units for CPM approval to ensure that the treatment is effective and does not unduly contrast with the surrounding landscape. The project owner shall also submit the plan to the City of Santa Clara Architectural Committee (or other appropriate entity) for review and comment. The submittal to the CPM shall include the City's comments. The plan shall include:

- 1) Specification, and 11" x 17" color photo simulations at life-size scale as seen from a northbound viewpoint on Lafayette Street (between KOPs 1 and 2), Highway 101 (KOP 4), and Raymond Street (KOP 5) of the proposed measure or measures to reduce the visibility of the equipment;

- 2) A detailed schedule for completion of the measures; and,
- 3) A procedure to ensure proper maintenance of the measures for the life of the project.

The project owner shall not implement the plan until approved by the CPM.

Verification: At least 60 days prior to start of construction, the project owner shall submit the plan for reducing the visibility of the HRSG equipment to the CPM for review and approval.

If the CPM notifies the project owner of any revisions that are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan.

Not less than 30 days prior to the start of commercial operation, the project owner shall notify the CPM that the screening measures are ready for inspection.

The project owner shall provide a status report regarding maintenance of the screening measures in the Annual Compliance Report.

4. To clarify the requirements for temporary screening for project-related construction, such as for perimeter sound walls and the gas-metering station, Pages 4.11-38 – 4.11-39, **Condition of Certification VIS-1** is revised to read:

VIS-1 The project owner shall ensure that visual impacts of construction of the sound walls, gas pipeline, metering station, and underground transmission line (if relocated offsite) are adequately mitigated. To accomplish this, the project owner shall require the following as a condition of contract with its contractors involved in constructing the sound walls, gas pipeline, metering station, and underground transmission line:

- a) The construction site and staging and material and equipment storage areas for gas metering station construction shall be visually screened from view from adjacent residences with temporary opaque or semi-opaque fencing. Fencing will be of an appropriate design and color, as determined by the Energy Commission Compliance Project Manager (CPM).
- b) All evidence of sound wall, gas pipeline, and offsite underground transmission line construction activities, including ground disturbance in staging and storage areas, shall be removed, and all disturbed areas shall be remediated to an original or improved condition upon completion of construction, including the replacement of any vegetation or paving removed during construction. Any replacement plantings shall be monitored for a period of three years to ensure survival. During this period, all dead plant material shall be replaced.

The project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment a specific screening and restoration plan whose proper implementation will satisfy these requirements.

The project owner shall not implement the screening and restoration plan until receiving written approval from the CPM.

Verification: At least 60 days prior to construction of the gas metering station, the project owner shall submit a temporary visual screening plan to the CPM for review and approval and to the City of Santa Clara for review and comment.

At least 60 days prior to construction of the perimeter sound walls, gas pipeline and metering station, and offsite underground transmission line, the project owner shall submit ~~the screening and restoration plans~~ to the CPM for review and approval and to the City of Santa Clara for review and comment.

If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

The project owner shall notify the CPM within seven days after installing the temporary screening that it is ready for inspection.

The project owner shall notify the CPM within seven days after completing surface restoration that the restored areas are ready for inspection.

5. To clarify the timing of the condition, and the requirements for surface treatment review, Pages 4.11-39 – 4.11-40, **Condition of Certification VIS-2** is revised to read:

VIS-2 Prior to ~~first turbine roll~~ commercial operation, the project owner shall treat the surfaces of all project structures, buildings, and walls visible to the public such that: their colors minimize visual intrusion and contrast by blending with the landscape; their surfaces do not create excessive glare; and they are designed consistent with the City of Santa Clara Community Design Guidelines. The project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment, a specific treatment and design plan, the proper implementation of which will satisfy these requirements. The submittal to the CPM shall include the City's comments. The treatment and design plan shall include:

- a) Specification, and 11" x 17" color photo simulations (KOPs 2 and 5) at life size scale when viewed at 18 inches, of the treatment/design proposed for use on project structures, including structures treated during manufacture;
- b) A list of each major project structure, piping, building, tank, transmission line tower and/or pole, and wall and/or fence specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation). The transmission line structures shall

have a neutral gray finish. The conductors shall be non-specular conductors and non-reflective, and the insulators shall be non-refractive;

- c) Two sets of brochures and/or color chips for each proposed color;
- d) If practicable, samples at least 5" by 7" of each proposed treatment and color on each material to which they would be applied that would be visible to the public;
- e) A detailed schedule for completion of the treatment; and
- f) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until the project owner receives notification of approval of the treatment plan by the CPM.

Verification: The project owner shall submit its proposed treatment and design plan to the CPM and the City of Santa Clara at least 60 days prior to ordering the first structures that are color treated during manufacture.

If the CPM notifies the project owner that any revisions of the plan are needed, the project owner shall submit to the CPM a revised plan within 30 days after that notification.

Prior to ~~first turbine roll~~ commercial operation, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

6. To clarify the timing of the Condition, and the required recordkeeping, Page 4.11-42, **Condition of Certification VIS-4** is revised to read:

VIS-4 The project owner shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, the vicinity, and the nighttime sky is minimized. Lighting shall be installed consistent with the City of Santa Clara Zoning Ordinance and Community Design Guidelines. To meet these requirements the project owner shall ensure that:

- a) Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to reduce light trespass outside the project boundary while taking into consideration security concerns.

- b) All lighting shall be of minimum necessary brightness consistent with worker safety and security concerns;
- c) High illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have switches or motion detectors to light the area only when occupied; and
- d) Plant operations staff shall record all lighting complaints received and document the resolution of those complaints. All records (following the general format of that in **Visual Resources Appendix VR-3**) of lighting complaints shall be kept in the on-site compliance file.

Verification: At least 90 days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to arrange a meeting to discuss the documentation required in the lighting mitigation plan.

At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment a plan that describes the measures to be used and demonstrates that the requirements of the condition will be satisfied. The submittal to the CPM shall include the City's comments. The project owner shall not order any exterior lighting until it receives CPM approval of the lighting mitigation plan.

Prior to ~~first turbine roll~~commercial operation, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection.

The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report for that year.

7. To clarify the timing of the condition, **Condition of Certification VIS-6** is hereby revised to read:

VIS-6 The project owner shall reduce cooling tower visible vapor plumes through the use of a dry-cooling section that has a stipulated plume abatement design point of 35 degrees Fahrenheit and 85 percent relative humidity. An automated control system will be used to ensure that plumes are abated to the maximum extent possible for the stipulated design point.

Verification: At least 30 days prior to ~~the first turbine roll~~construction of the cooling tower, the project owner shall provide to the CPM for review and approval the specifications for the automated control systems and related systems and sensors that will be used to ensure maximum plume abatement from the dry-cooling section of the cooling tower.

WASTE MANAGEMENT

Supplemental Testimony of Ellen Townsend-Hough

1. Page 4.12-4, **Nonhazardous Solid Wastes** paragraph one is hereby revised to read:

NONHAZARDOUS SOLID WASTES

Anticipated nonhazardous solid wastes generated during construction are detailed in Section 8.14.2.1 of the AFC (SVP 2002). Approximately 40 tons of wood, paper, glass and plastics, 15 tons of excess concrete, and 5 tons of scrap metal could be generated during project construction. The applicant will dispose of 2,000 tons of soil in BFI's Newby Island Class III Landfill. The excavated soil will be tested for hazardous characteristics before disposal to determine if soil meets the disposal criteria for a Class III landfill. Wherever possible and practical, these wastes would be recycled. Nonrecyclable wastes would be collected and disposed of in a Class III landfill. A possible exception might include the disposal of the waste concrete in a clean fill site if one is available.

2. Page 4.12-6, **IMPACT ON EXISTING WASTE DISPOSAL FACILITIES**, paragraph one is hereby revised to read:

IMPACT ON EXISTING WASTE DISPOSAL FACILITIES

Nonhazardous waste disposal sites suitable for disposal of project-related construction and operation wastes are identified in Table 8.14-2 of the AFC (SVP 2002). During construction of the proposed project, 60 tons of nonhazardous waste are anticipated to be generated. This would consist of 40 tons of wood, glass, paper, and plastic, 15 tons of concrete, and 5 tons of metal. Recycling would reduce much of the wastes, including paper, wood, glass, plastic, and scrap metal. The applicant will also dispose of 2,000 tons of excavated soil from the project site. The excavated soil will be replaced by foundation base fill. Project operation will generate minimal amounts of nonhazardous waste, on the order of 20 cubic yards per year. Thus, the total amount of nonhazardous waste generated from project construction and operation will contribute only a fraction of 1 percent of available landfill capacity. Staff concludes that this potential impact will be less than significant.

3. Because of the applicant's stated intention to dispose of 2,000 tons of excavated materials from the project site, the following condition of certification is hereby added to the Waste Management section:

WASTE-6 The project owner shall provide a soil management workplan to the CPM providing the methods which will be used to properly handle or dispose of soil which may contain contaminants. The workplan will discuss: 1) landfill facility disposal options, 2) acceptance criteria, and 3) soil contaminant characterization requirements, including a protocol for testing for chlorinated pesticides and metals from historical pesticide use at the site.

Verification: The project owner shall submit the soil management workplan to the CPM for approval 60 days prior to any earth moving activities, including those associated with site mobilization, ground disturbance, or grading as defined in the general conditions of certification.

WORKER SAFETY AND FIRE PROTECTION

Supplemental Testimony of Geoff Lesh

1. To clarify the backup source for firefighting water, Page 4.13-9, "Fire Protection," line 13-14 is hereby revised to read:

Raw water for use as fire water would be supplied by the City of Santa Clara, with backup supply coming from ~~a to-be-drilled groundwater well on the project site capable of delivering 1,000 — 1,500 gpm~~ the cooling tower.

2. The PPP design does not include a deluge spray system, which would be hazardous to electric machinery operations. Accordingly, the 2nd and 3rd paragraphs under "Fire Protection" on page 4.13-9 are hereby revised to read:

A fire protection system would be provided for the combustion turbine, generator and accessory equipment. Fire detection sensors would also be installed. ~~A deluge spray system would provide fire suppression for the generator transformers and auxiliary power transformers.~~ Fire hydrants and hose stations would be used to supplement the plant fire protection system.

FACILITY DESIGN

Supplemental Testimony of Shahab Khoshmashrab

1. The applicant has requested minor changes to the “major structures and equipment list” accompanying **Condition of Certification GEN-2**. Staff agrees with these changes. **Condition of Certification GEN-2** is hereby revised to read:

GEN-2 Prior to submittal of the initial engineering designs for CBO review, the project owner shall furnish to the CPM and to the CBO a schedule of facility design submittals, a Master Drawing List and a Master Specifications List. The schedule shall contain a list of proposed submittal packages of designs, calculations and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM when requested.

Verification: At least 60 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the Master Drawing List and the Master Specifications List of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in **Facility Design Table 1** below. Major structures and equipment shall be added to or deleted from the table only with CPM approval. The project owner shall provide schedule updates in the Monthly Compliance Report.

Facility Design Table 1: Major Structures and Equipment List

Equipment/System	Quantity (Plant)
Combustion Turbine (CT) Foundation and Connections	2
Combustion Turbine Generator Foundation and Connections	2
Steam Turbine (ST) Foundation and Connections	1
Steam Turbine Generator Foundation and Connections	1
Steam Condenser and Auxiliaries Foundation and Connections	1
Heat Recovery Steam Generator (HRSG) Structure, Foundation and Connections	2
HRSG Feed Pumps Foundation and Connections	4
HRSG Stack Structure, Foundation and Connections	2
CT/ ST Main Transformer Foundation and Connections	2
ST Main Transformer Foundation and Connections	4
Auxiliary or Station Service Transformer Foundation and Connections	<u>4</u>
CT Inlet Air Plenum Structure, Foundation and Connections	2
<u>CT Inlet Air Chillers</u>	<u>2</u>
HRSG Transition Duct from CTG — Structure	2
Condensate Pumps Foundation and Connections	3

Equipment/System	Quantity (Plant)
Circulating Water Pumps Foundation and Connections	3
Power Cycle Makeup and Storage Pumps Foundation and Connections	2
Cooling Tower Makeup Pumps Foundation and Connections	2
Demineralized Water Storage Tank and Pump Foundations and Connections	1
Condensate Storage and Transfer System Foundation and Connections	4
Condensate Water Tank Foundation and Connections	4
Closed Cycle Cooling Water Heat Exchanger Foundation and Connections	2
Auxiliary Cooling Water Pumps Foundation and Connections	2
Waste Water Collection System Foundation and Connections	1
Fuel Gas Heater Foundation and Connections	4
Fire Protection System	1
Cooling Tower Structure, Foundation and Connections	1
Generator Breakers Foundation and Connections	3
Transformer Breakers Foundation and Connections	3
Natural Gas Metering Station Structure, Foundation and Connections	1
Natural Gas Compressor Skid Foundation and Connections	3
Ammonia Storage Facility Foundation and Connections	1
Closed Cycle Cooling Pumps Foundation and Connections	2
Closed Cycle Cooling Heat Exchangers	2
Demineralizer – Reverse Osmosis (RO) System Foundation and Connections	21
Warehouse/Shop Structure, Foundation and Connections	1
Gas Compressor Building Structure, Foundation and Connections	1
Ammonia Vaporizer System Foundation and Connections	42
Continuous Emissions Monitoring Systems Structure, Foundation and Connections	42
Sound Wall at Property Line	1
Potable Water Systems	1 Lot
Drainage Systems (including sanitary drain and waste)	1 Lot
High Pressure and Large Diameter Piping and Pipe Racks	1 Lot
HVAC and Refrigeration Systems	1 Lot
Temperature Control and Ventilation Systems (including water and sewer connections)	1 Lot
Building Energy Conservation Systems	1 Lot
Switchyard, Buses and Towers	1 Lot
Electrical Duct Banks	1 Lot

RESPONSE TO PUBLIC AND AGENCY COMMENTS

Below are the comments received from governmental agencies on Phase I (all areas except Air Quality and Alternatives) of the Staff Assessment (SA) of the Pico Power Project (PPP) Application for Certification. The comments are answered directly below, and in the applicable technical section in the Corrections and Additions Chapter of this Addendum. Comments were also received from the Applicant, many of which are responded to in the following section, "Response to Applicant Comments." No comments on the SA were received from the general public.

RESPONSE TO AGENCY COMMENTS

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In a December 10, 2002 letter providing comments on the PPP AFC, the California Department of Toxic Substances Control (DTSC) offered the following comment:

"The Phase I (Environmental Site Assessment) report for the power plant site notes that the site may have previously been occupied by the agricultural field in the 1954 and 1960 aerial photographs. Therefore, it may be prudent to require sampling for chlorinated pesticides and metals, which may have been used in metallic pesticides."

The applicant responded on January 10, 2003 that "Given the time that has elapsed since the cessation of agricultural activities (over 30 years) and the regional climatic conditions (moderate precipitation), the possibility that pesticides are present in the soil at concentrations that would pose a significant risk to human health is highly unlikely."

In a March 24, 2003 oral comment to staff concerning Phase I of the SA, DTSC addressed the Applicant's response: "DTSC disagrees with not testing for pesticides because of the 30 year time lapse. Chlorinated pesticides and metals may persist for periods longer than 30 years."

Staff's response: Staff will recommend that the applicant complete additional testing for pesticides as part of **Condition of Certification WASTE-6**. Please see the Corrections and Additions chapter of this addendum for the changes to this condition.

RESPONSE TO PUBLIC COMMENTS (NON-INTERVENORS)

WRITTEN COMMENTS

None

ORAL COMMENTS

None

RESPONSE TO APPLICANT COMMENTS

Below are the responses to the substantive comments on Phase I of the PPP SA, submitted by the applicant on April 15, 2003. Responses to the applicant's comments that require changes to the SA also appear in Chapter 3 of this Addendum, entitled "Changes or Additions to the Staff Assessment." The responses in general reply to those applicant comments that address Staff's conclusions or conditions of compliance made in the SA, as well as those addressing incorrect or outdated data. The responses to the applicant's comments are not comprehensive in that many comments by the applicant were not addressed, though Staff is prepared to discuss all the applicant's comments during hearings, if needed.

BIOLOGICAL RESOURCES

1. Applicant's Comment- Page 4.1-13, Compliance With LORS, Sentence 2: This sentence states "...no formal habitat compensation plan has been made." SVP has prepared and filed a draft Resource Management Plan that proposes a formal habitat compensation plan that includes purchase of serpentine bunchgrass ecosystem habitat, endowment for conservation management, and an adaptive management plan. The plan, as submitted, includes a range of acreage that might be proposed in a final plan. The plan will be finalized when the final habitat compensation acreage is determined.

Staff's Response: Staff will change the word "formal" to "final." Staff and the USFWS believe that the ISCST3 model is the appropriate model for use in assessing the project's potential impacts to habitat designated as critical for the survival and conservation of the bay checkerspot butterfly. The results of the modeling indicated that the potential impact to critical butterfly habitats from the proposed project would be 40.19 acres. Results of the modeling did not indicate that the potential impact would be less than 40.19 acres. Based on results from the most appropriate model, the habitat compensation acreage necessary to mitigate the project's potential impacts to serpentine habitats to a less than significant level has been determined to be 40 acres.

2. Applicant's Comment - Page 4.1-13, Conclusions and Recommendations: "...Staff recommends that SVP provide a complete habitat compensation plan and Resource Management Plan prior to the release of the Addendum..." We believe that our habitat compensation plan and Resource Management Plan are complete. Though we have not proposed a final habitat compensation acreage number, we have proposed a range of acreage for habitat compensation. This information should be sufficient for Staff to complete its analysis.

Staff's Response: Staff has indicated that the amount of habitat compensation necessary to mitigate the project's potential habitat impacts to less than significant would be 40 acres. Staff has determined (see staff response to applicant's comment 1 above) that the projects potential impact would be 40.19 acres. A proposal of less than 40 acres of habitat compensation would not mitigate the projects potential impacts to serpentine habitats to levels less than significant. Although a range of habitat compensation acreages were submitted, a specific amount of habitat compensation was

not proposed. Staff recommended, in its assessment, that applicant submit the exact amount of habitat compensation being proposed. It is staff's opinion that less than 40 acres of habitat compensation would not be sufficient to mitigate the project's potential impacts to bay checkerspot butterfly critical habitat to levels less than significant.

3. Applicant's Comment - Page 4.1-19: Applicant has proposed changes to Condition of Certification **BIO-9** to clarify the mitigation required for serpentine habitat compensation.

Staff Response: Staff agrees to specify that the specified mitigation if compensation for **potential** impacts, but because staff has determined the amount of habitat compensation necessary to mitigate the project's potential habitat impacts to less than significant would be 40 acres, staff disagrees about adding the applicant's requested "maximum of" in front of the specified "40 acres." See the Corrections and Additions chapter of this document for the complete condition.

HAZARDOUS MATERIALS

1. Applicant's Comment: The applicant noted that the local Certified Unified Program Authority (CUPA) with jurisdiction within the City of Santa Clara is the Santa Clara City Fire Department Hazardous Materials Division, rather than Santa Clara County Health Department, Division of Environmental Health.

Staff Response: Staff agrees that the CUPA for the City of Santa Clara is the Santa Clara City Fire Department Hazardous Materials Division, and has made revisions found in the Corrections and Additions chapter of this Addendum accordingly.

2. Applicant's Comment: Addressing Page 4.3-6, Paragraph 4, last sentence, the applicant stated that the restrictions on storage and use of flammable materials near the sulfuric acid tank should not apply to natural gas pipelines or portable materials, and has asked for revisions to the SA, and specifically to **Condition of Certification HAZ-6**, accordingly.

Staff Response: Staff agrees that the restriction on storage does not apply to natural gas pipelines or portable materials (such as welding tanks). **HAZ-6** is aimed at preventing incompatible storage locations and was not intended to prohibit the occasional use of flammable material within 100 feet of the sulfuric acid tank. Staff believes that conditions in the Worker Health and Safety section of the Staff Assessment will adequately ensure that any use of flammable materials near the sulfuric acid tank will be conducted in a safe manner. Staff agrees with the requested change, and has made revisions found in the Corrections and Additions chapter of this Addendum accordingly.

3. Applicant's Comment: Addressing the "Conclusion" paragraph on page 4.3-11, the applicant noted that the federal RMP requirement does not apply (aqueous ammonia at concentrations less than 20 percent by weight do not require a federal RMP, per 40 CFR Part 60), and therefore submittal would be to CEC and Santa Clara City Fire Department only, not EPA.

Staff Response: Staff agrees with the requested change, and has made revisions found in the Corrections and Additions chapter of this Addendum accordingly.

4. Applicant's Comment: The applicant noted that a secondary containment building is not part of the project description and asked that a reference to such a building be removed from **Condition of Certification HAZ-4**.

Staff Response: Staff agrees with the requested change, and has made revisions found in the Corrections and Additions chapter of this Addendum accordingly.

NOISE

1. Applicant's Comment: The applicant commented that sound walls that have been deleted from the project design, and has requested deletion of any reference to inclusion of sound walls in the project design.

Staff's Response: Deletion of these sound walls from the project design does not change staff's conclusions concerning potentially significant noise impacts, nor staff's recommended Conditions of Certification. However, for clarity, the reference to noise barriers found on page 4.5-14, paragraph 4, of the March 26 SA has been removed (see Corrections and Additions chapter).

2. Applicant's Comment: The applicant has asked for changes to **Conditions of Certification Noise-4, Noise-6 and Noise-8**, seeking clarity of specified noise limits and restrictions on hours of operation.

Staff's Response: Staff agrees with the applicant's comments on these conditions. Changes to the conditions can be found in the Corrections and Additions chapter of this addendum.

SOIL & WATER RESOURCES

1. Applicant's Comment- Page 4.8-21 paragraph 2 and page 4.8-33 paragraph 1: The applicant does not agree with the statement that "...given the limited on-site sampling of groundwater and the lack of information... staff cannot fully assess the potential for significant adverse impacts from groundwater contamination that would be caused by project groundwater pumping (from the backup well).

The SVP believes that there is sufficient information in the record for staff to make a finding that a significant adverse impact is unlikely (per staff discussion at the April 8, 2003 workshop). SVP has prepared an aquifer test program and testing plan and the plan has been approved by the staff and Santa Clara Valley Water District. This program would be implemented before the SVP uses the backup well for cooling water and would be sufficient to confirm the finding of no significant impact. If the test program were to lead to a finding of a potentially significant adverse impact to the aquifer, SVP would propose to modify the use of the backup well to mitigate this impact to a level below significance.

Staff's Response: Staff draws a distinction between having enough information to fully assess potential impacts, and conclude that impacts are unlikely. However, staff agrees with the applicant that the aquifer test program would be sufficient to confirm the finding of no significant impact or provide the information necessary to mitigate this impact to a level below significance. Revisions to the SA text to reflect this agreement can be found in the Corrections and Additions chapter of this Addendum.

2. Applicant's Comment-Page 4.8-25, paragraph 2: The applicant has revised the stormwater runoff calculations for the project. Revised numbers are partly due to a revised allocation of paved and graveled surfaces and partly due to the use of more conservative drainage assumptions. The revised figures for the 10-year storm are:

Pre-development: 3.21 cfs
Post-development: 4.52 cfs

For the 100-year storm:
Pre-development: 4.78 cfs
Post-development: 6.74 cfs

The net increase in runoff would be 1.31 cfs (10 year) or 1.96 cfs (100 year), or approximately 41 percent.

The applicant believes the existing storm drain system has sufficient reserve capacity to handle the existing plus project storm drainage. Since the project area is mostly built out, cumulative impacts to the drainage system are unlikely as well.

Staff's Response: Staff has received a copy of a letter from the City of Santa Clara Engineering Department that states the increased runoff will not cause the storm water collection system to exceed its capacity. The calculated runoff volume provide by the City of Santa Clara is slightly higher than that provided by the applicant. The staff assessment text has been revised to include the updated calculations provide by the applicant as well as noting the calculation provided by the City. The revisions to the SA text can be found in the Corrections and Additions chapter of this Addendum.

3. Applicant's Comment-Page 4.8-33, Paragraph 4, significance criteria: The applicant requests that staff clarify in the Staff Assessment that there must both be detection of contamination concentrations of Title 22 constituents above the MCLs or detection of petroleum hydrocarbons and the finding of a calculated vertical downward gradient between the Upper and Lower Aquifer zones that would allow for migration of these contaminants for there to be a finding of significant adverse impact resulting from the backup well. The applicant also requests that staff clarify that certain kinds of petroleum hydrocarbon contamination (minor spill of crank-case oil for example) would not pose a significant threat to the Lower Aquifer.

Staff's Response: Staff has reviewed the language in the Staff Assessment and has revised the text to avoid any confusion related to the criteria for the determination of a significant impact. The revisions to the SA text can be found in the Corrections and Additions chapter of this Addendum.

4. Applicant's Comment-Pages 4.8-33, Paragraph 7: The applicant does not believe it would be necessary to amend the project license if the aquifer test indicate a significant impact may occur. The applicant states; "Since any project changes necessary to avoid adverse impacts to water supply resulting from operation of the backup water supply well would not involve a change of project equipment, but merely a change in operational modes, SVP proposes that a finding of significant adverse impact lead to a change in the way in which the backup well would be used (for example, a limit on annual pumping), as documented in an operational plan for the well, rather than a license amendment."

Staff's Response: Staff agrees that minor changes in the operation of the backup well would not require an amendment. The text has been revised to reflect this condition; however, staff does not intend this revision to imply an amendment would not be needed if the project change is significant enough that the law requires an amendment. Revisions to the SA text to reflect this clarification can be found in the Corrections and Additions chapter of this Addendum.

5. Applicant's Comment-Page 4.8-34 and 35, **Conditions of Certification Soil & Water 1** through **3**: SVP requests modifications to **SOIL & Water 1** through **3** to eliminate submittal of The Sedimentation and Erosion Control Plan and the SWPPPs to Santa Clara County and SCVWD as the referenced plans are outside these agencies' jurisdiction.

Staff's Response: The NPDES permit is jointly held by Santa Clara County, SCVWD and 13 cities of which includes the City of Santa Clara. This group has formed the Santa Clara Valley Urban Runoff Pollution Prevention Program. The Dischargers each have jurisdiction over and/or maintenance responsibility for their respective municipal separate storm drain systems and/or watercourses in the Santa Clara basin. Staff agrees with the applicant's request and has revised the text accordingly, as shown in the Corrections and Additions chapter of this Addendum.

6. Applicant's Comment- Page 4.8-36, **Condition of Certification Soil & Water 6**: SVP requests modification to **SOIL & WATER 6** to include a provision for use of backup water in excess of 45 days per calendar year if an unavoidable interruption of the primary water supply is due to an Act of God, a natural disaster, an unforeseen emergency or other unforeseen circumstances outside the control of the project owner.

Staff's Response: Staff does not agree that this is the appropriate place for such a provision. Staff does not intend to add an Act of God clause to individual Conditions of Certification. Rather, staff anticipates that the CPM and/or the Commission will

determine whether relief from particular conditions of certification is appropriate following a natural disaster or other Act of God.

7. Applicant's Comment- Page 4.8-36 and 37, **Condition of Certification Soil & Water 8**: SVP requests the modification to set clear performance standards for the aquifer test, to eliminate the requirement for amendment of the license and replace it with the preparation and implementation of a mitigation plan.

Staff's Response: Staff has modified the condition to set performance standard and removed the language that require an amendment if mitigation is necessary.

TRAFFIC AND TRANSPORTATION

1. Applicant's Comment: Noting that it now plans to utilize rail shipments for deliver of some of the PPP's major components to an intermodal facility near the project site, and that the components would then be delivered to the project site via oversized trucks, the applicant has asked that **Condition of Certification TRANS-7** be revised to allow an additional delivery route of the large loads from the intermodal facilities.

Staff's Response: Staff agrees with the applicant's proposed additional route for trucks delivering large loads to the site. The change is noted in the Corrections and Additions chapter of this addendum.

VISUAL RESOURCES

1. Applicant's Comment: Although the Applicant is in agreement with the mitigation measures proposed by staff to reduce the visual impacts of the Pico Power Project to a less than significant level, the Applicant does not agree with staff's finding that the impacts at key observation point (KOP) 2 would be significant.¹

Staff's Response: The Applicant is entitled to their opinion of staff's conclusions; after all, aspects of visual resources analysis are inherently subjective. However, the Applicant makes several statements regarding visual resources impact analysis in general, and about staff's methodology specifically that are incorrect. The discussion that follows addresses these misconceptions.

The Applicant states that staff's analysis is "moot" because staff did not identify any viewshed as "significant" and therefore worthy of protection from visual impacts. The Applicant states that the basic steps of environmental impact analysis include defining whether the project area includes "potentially significant environmental resources (resources of demonstrable public interest)," and if so, whether the effects of the project would change the characteristics of the resources such that the resource would no longer be "significant."

¹ At KOP 2, the overall visual sensitivity was considered moderate and the overall visual change was considered moderate to high.

The approach described by the Applicant is more appropriately used for assessing impacts to Cultural Resources, not Visual Resources. For Cultural Resources, the Environmental Checklist (Appendix G of the CEQA Guidelines), lists the following questions: “Would the project a) cause a substantial change in the significance of a historical resource... b) cause a substantial adverse change in the significance of an archaeological resource...” Under Aesthetics (Visual Resources), the questions are “Would the project a) have a substantial adverse effect on a scenic vista; b) Substantially damage scenic resources...; c) Substantially degrade the existing visual character or quality of the site and its surroundings...” Whereas questions a) and b) under Aesthetics deal with impacts to scenic areas (which would capture what the Applicant would categorize as “significant environmental resources” or “resources of demonstrable public interest”), question c) concerns sites and viewsheds that one would not classify as “scenic.” CEQA does not provide guidance on how these “non-scenic” areas should be considered in visual resource impacts analyses, nor does CEQA define how high the existing visual quality of these areas needs to be for a project to significantly impact them.

In staff’s opinion, a project could significantly impact a view of average (moderate) or below average (low to moderate or low) visual quality, if both the overall visual sensitivity of the affected view, which is a function² of visual quality, viewer concern, and viewer exposure³, and the level of visual change, which is a function of contrast, dominance, and view disruption are high enough. For example, in the Contra Costa power plant siting case, staff found the visual impacts to the Sausalito Ferry clubhouse of the Sportsmen Yacht Club to be significant, even though the visual quality of the view was low (a heavy industrial area), and in this Applicant’s view, presumably not “worthy of protection.”

The Applicant also comments that the Staff Assessment did not define, other than “outstanding” and “low,” the categories of visual quality that were used in the assessment. Although not explicit (only a citation to Buhyoff, et al, 1994, is provided in the Staff Assessment), staff relied on Buhyoff’s visual quality ratings (which the Applicant included in their AFC), as well as professional judgment, to assess the visual quality of the view at each KOP.

2. Applicant’s Comment: The applicant requested several minor changes to the Visual Resources Conditions of Certification, related to the timing of the requirement of the conditions, etc.

Staff’s Response: Staff has addressed these requested changes in the Corrections and Additions chapter of this Addendum.

² In determining overall visual sensitivity, staff typically gives equal weight to each of the three factors, but if a factor has particular importance in a specific case, it is given additional weight.

³ Overall viewer exposure is comprised of three factors: visibility, number of viewers, and duration of view. Within exposure, these factors are typically given equal weight; however, if a factor has an extreme value (e.g., very high number of viewers), staff gives additional weight to that factor).

WASTE MANAGEMENT

1. Applicant's Comment: The Applicant has requested several minor changes to the Worker Safety chapter to clarify the backup source for firefighting water and that the PPP design does not include a deluge spray system.

Staff's Response: Staff agrees with these minor changes, which are listed in the Corrections and Additions chapter of this Addendum.

WORKER SAFETY AND FIRE PROTECTION

1. Applicant's Comment: The Applicant has requested several minor changes to the Worker Safety chapter to clarify the backup source for firefighting water and that the PPP design does not include a deluge spray system.

Staff's Response: Staff agrees with these minor changes, which are listed in the Corrections and Additions chapter of this Addendum.

GEOLOGY, MINERAL RESOURCES AND PALEONTOLOGY

1. Applicant's Comment: The applicant has requested that the qualifications for the Paleontological Resource Specialist be reduced from three years of paleontological resource mitigation and field experience in California to one year of experience in California. The applicant states that a requirement for three years of California experience could eliminate many worthy candidates from consideration. They recommended modifying the condition or the verification to allow for more flexibility in qualifying a PRS.

Staff's Response: Staff believes that qualifications described by the Society of Vertebrate Paleontologists (SVP) in their guidelines require an adequate level of experience for the Paleontological Specialist responsibilities as outlined in the Conditions of Certification. Staff does not recommend minimizing the qualifications from three years to only one year of experience in California. It is appropriate for a professional in this supervisory capacity to be familiar with California geology, local paleontological resources, qualified monitors and curating institutions, and the PRS should have demonstrated compliance with the California Environmental Quality Act. Staff believes that three years of California experience is very important and shows that the Paleontological Resource Specialist is capable of selecting and supervising a qualified mitigation team and mitigating significant California resources. Based on the status of current Commission projects compared to the activity in 2000 and 2001, there should be available individuals to meet these qualifications.